A8/2673

FEE TRANSMITTAL
for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

Complete if Known	
Application Number	09/802,963
Filing Date	03/12/2001
First Named Inventor	Paul Anthony John Nolan
Examiner Name	J. Wang
Art Unit	2673
Attorney Docket No.	

[X] Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 170.00

METHOD OF PAYMENT (check all that apply)

[ ] Check [X] Credit card [ ] Money Order [ ] Other [ ] None

[ ] Deposit Account:

Deposit Account Number

Deposit Account Name

The Director is authorized to: *(check all that apply)*
[ ] Charge fee(s) indicated below [ ] Credit any overpayments
[ ] Charge any additional fee(s) or any underpayment of fee(s)
[ ] Charge fee(s) indicated below, **except for the filing fee**
to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee ($)	Fee Code	Fee ($)		
1001	790	2001	395	Utility filing fee	
1002	350	2002	175	Design filing fee	
1003	550	2003	275	Plant filing fee	
1004	790	2004	395	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) ($)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims		Fee from below		Fee Paid
Total Claims		-20** =		X	=
Independent Claims		- 3** =		X	=
Multiple Dependent					

Large Entity		Small Entity		Fee Description
Fee Code	Fee ($)	Fee Code	Fee ($)	
1202	18	2202	9	Claims in excess of 20
1201	88	2201	44	Independent claims in excess of 3
1203	300	2203	150	Multiple dependent claim, if not paid
1204	88	2204	44	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($)

**or number previously paid, if greater. For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee ($)	Fee Code	Fee ($)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for *ex parte* reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	430	2252	215	Extension for reply within second month	
1253	980	2253	490	Extension for reply within third month	
1254	1,530	2254	765	Extension for reply within fourth month	
1255	2,080	2255	1,040	Extension for reply within fifth month	
1401	340	2401	170	Notice of Appeal	170
1402	340	2402	170	Filing a brief in support of an appeal	
1403	300	2403	150	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,370	2501	685	Utility issue fee (or reissue)	
1502	490	2502	245	Design issue fee	
1503	660	2503	330	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____
*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 170.00

SUBMITTED BY			Registration No. (Attorney/Agent)	22,693	Telephone	(703) 442-4800
Name (Print/Type)	James C. Wray				Date	12/06/2004
Signature						

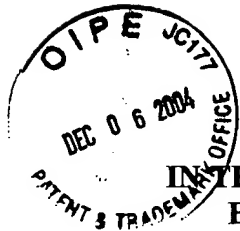**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Paul Anthony John Nolan

Serial No.: 09/802,963

Filed: March 12, 2001

For: ALPHA CHANNEL FILTER

Art Unit: 2672

Examiner: Wang, Jin Cheng

APPEAL BRIEF

TABLE OF CONTENTS

09/802,963

REAL PARTY IN INTEREST

PAUL ANTHONY JOHN NOLAN, the above identified party, is the real party in interest in the above-identified case.

3

RELATED APPEALS AND INTERFERENCES

No other related appeals or interferences are pending at this time.

STATUS OF CLAIMS

Claims 1 – 8, all pending claims, were finally rejected over references of record.

A copy of the appealed claims is appended hereto in the CLAIMS APPENDIX.

<u>STATUS OF AMENDMENTS</u>

Amendments made after the final Office Action were not entered pursuant to an Advisory

Action dated November 17, 2004.

09/802,963

SUMMARY OF CLAIMED SUBJECT MATTER

An image processing filter typically processes an image, and the resultant processed image is merged with an unprocessed version of the image using an alpha channel. If the ability to modify the alpha channel based on user input is provided, and the image reprocessed upon the alpha channel being modified, it is possible for image processing filters to be painted on to an image. In a typical situation, the image processing filter does not know about the alpha channel, and produces the same result no matter what transparency is eventually applied to it. (Specification page 2, lines 11-19).

A typical filter generates its results based on the pixels it processes. This invention uses the paint layer system to take into consideration how much paint has been applied to the pixel being processed. This is innovative because prior image processing filters do not take into consideration the amount the effect is being applied when calculating the filter's result. (Specification page 2, lines 20-25).

An apparatus for creating an emblazoning effect in a graphical image has a processor, a primary buffer for storing primary pixel values representing a region, and a secondary buffer for storing secondary pixel values representing a region. A user-modifiable alpha channel stores tertiary values for pixels representing the same region. A function represents both the application of color and of brightness values to input pixel values. The processor executes the function on the secondary pixel values to the extent represented by the tertiary pixel values held in the alpha channel. The resultant pixel values are stored as the primary pixel values, in the primary buffer. A user-activated means copies the primary pixel values stored in the primary

7

buffer to the secondary pixel values stored in the secondary buffer. (Specification page 2, line 26 to page 3, line 13).

Emblazoning effects are created in a graphical image by choosing a media image, causing edges of the media image to have less transparency, adding the media image to a paint layer, and brightening parts of the paint layer with the media image. (Specification page 3, lines 14-17).

Effects are created in a processed graphic image by providing an image channel with a graphic image having source pixels, providing an alpha channel having alpha channel pixels which are spatially equivalent to the source pixels, assigning color values to the alpha channel pixels, brightening the color values assigned to alpha channel pixels, and causing edges of an image formed by the alpha channel pixels to have less transparency. (Specification page 3, lines 18-25).

Causing edges of the media image to have less transparency is not a requirement. You could have the edges sharp and the interior smooth, and the filter would still work; it would just appear to build up slightly differently. (Specification page 3, line 26 to page 4, line 3).

Effects in a graphic image are created by providing a source image channel having source pixels, providing a color level with selected colors, and providing an alpha channel with alpha channel pixels which are spatially equivalent to the source pixels. (Specification page 4, lines 4-7).

The simplest form of the invention can be expressed as ProcessedPixel=AlphaPixel. If this function were applied to every pixel in an image, the result would be similar to painting on white paint. (Specification page 5, lines 1-4).

8

Another function is ProcessedPixel=SourcePixel+AlphaPixel. This would result in each pixel in the image being brightened by an amount relative to the spatially equivalent alpha channel pixel. (Specification page 5, lines 5-8).

A very useful function is ProcessedPixel=CurrentColor+AlphaPixel. The result is that when the user starts to paint, the currently selected color is displayed, but as more and more paint is applied, the color is brightened. The media image 10 (Figure 1) is chosen in such a way as to cause the edges 11 of the media to have less transparency, so that when added to the paint layer 13 (Figure 2), certain parts 15 of the paint layer become brighter than others, creating a very pleasing effect 17 that looks like fire 19, as shown in Figure 3. (Specification page 5, lines 9-17).

The function that generates the fire effect works by taking the color value assigned to the alpha channel, and brightening it based on the value of the current paint layer value. (Specification page 5, lines 18-20).

There are many ways of achieving the brightening, but a non-linear method gives more pleasing results. (Specification page 5, lines 21-22).

The current implementation works as shown in Figure 3 is as follows: (Specification page 5, lines 23-24).

Brightness=AlphaChannel(x,y); (Specification page 5, line 25).

NewBrightness=Brightness^2 (Specification page 5, line 26).

FirePixel(x,y)=UndoImage(x,y)+NewBrightness (Specification page 6, line 1).

In the above implementation, a value representing white is returned if the alpha channel pixel is above a certain value. Instead of returning white, the spatially equivalent pixel of a secondary image (which could also be the primary image) could be returned, as shown in Figure

9

4. This has the effect of fire 19 burning through to a second image 21. This pixel from a secondary image could be blended with the value computed in the method above dependant on how high the value of the alpha channel pixel is. This would have the effect of burning through to the secondary image more smoothly. (Specification page 6, lines 2-11).

A further form of the invention is to perform a complex mapping of the alpha channel, and use this as an input in an equation. For example, the filter maps multiple pixels in the alpha channel to one resultant value in such a way as to emboss the alpha channel. The result of the embossing 23 is used to affect the brightness of the current color being applied. It gives the effect of the paint 25 being applied having a sense of depth, due to the embossing giving the paint highlights 27 and shadows 29, as shown in Figure 5. (Specification page 6, lines 12-20).

I have invented a new class of image processing filters that use values from an alpha channel image when calculating the resultant processed image, as opposed to standard image processing filters that simply use values from the primary image to produce their result. (Specification page 6, lines 21-26).

The invention need not be implemented in software, a hardware implementation is also possible. (Specification page 7, lines 1-2).

GROUNDS OF REJECTION

Claim 2 stands rejected under 35 U.S.C. 102(e) as being anticipated by Decoste et al. (U.S. Patent No. 6,317,142).

Claims 3-4 stand rejected under 35 U.S.C. 102(b) as being anticipated by Long (U.S. Patent No. 5,412,767).

Claims 1 and 5-8 stand rejected under 35 U.S.C. 103(a) as obvious over Long (U.S. Patent No. 5,412,767.

09/802,963

ARGUMENTS

Claim 2 is patentable under 35 U.S.C. 102(e) over Decoste et al. (U.S. Patent No. 6,317,142).

To be anticipating, a prior art reference must disclose "each and every limitation of the claimed invention[,]... must be enabling[,] and must describe...[the] claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." In re Paulsen, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Claim 2 is patentable over Decoste.

Claim 2 describes a method of creating effects in a graphical image, comprising choosing a media image, causing edges of the media image to have less transparency, adding the media image to a paint layer, and brightening parts of the paint layer with the media image, which is not taught, described or inherent in Decoste.

Decoste relates to a hierarchal organization for modifying and applying tools for manipulating data types.

For an invention to be anticipated, it must be demonstrated that each and every element of the claimed invention is present in the "four corners" of a single prior art, either expressly described therein or under the principle of inherency. Lewmar Marine Inc. v Barient Inc., 3 USPQ2d 1766, 1767-1768 (CAFC, 1987). The absence from prior art reference any claimed element negates anticipation. Kloster Speedsteel AB v. Crucible, Inc., 230 USPQ 81, 84 (Fed. Cir. 1986).

The Examiner notes that Decoste teaches a soft brush edge having an adjustable gradient that gives the edge a soft or fuzzy appearance (column 14 lines 63-67, column 15 lines 1-24).

12

Unlike Decoste, which teaches reducing the transparency of the <u>edges of a brush stroke</u>, the Applicant's invention teaches reducing the transparency of the <u>edges of the selected media image</u>.

When viewed with the rest of claim 2, it is apparent that the benefit of the Applicant's invention is that it allows the media image to be selected in such a way that the edges of the selection have reduced transparency. Therefore, the selected image can be applied to the paint layer and change the brightness of the paint layer based on the varied transparency values of the media image selected in this novel fashion. As shown in the drawings, the selected media image, with the opaque edges, can be added to a paint layer (such as a fire texture) so that the center of the image (the more transparent part) has the bright, combinatorial effect of showing the fire texture and the image and the edges of the image (the more opaque part) does not allow much or any of the paint layer to bleed through.

Replicating this effect using the methods described in Decoste would be a tedious process of applying increasingly transparent brush strokes radiating outward, requiring constant adjustment of the brush transparency. The Applicant's invention simply requires three easy steps: (1) providing a paint layer of the desired type, (2) selecting the image such that <u>the edges of the selected image are less transparent</u>, and (3) combining the two, a method superior to that taught by Decoste.

Decoste merely teaches the common feature of many paint programs, that of opening an image and painting on it with a brush, producing a wholly different effect than that of the Applicant's new method. This is obvious from viewing Figure 14 of Decoste, which provides for the altering of brush characteristics, <u>not</u> selected image characteristics.

13

Since the cited reference does not disclose all the elements of the present invention, the reference cannot anticipate the present invention. "Thus, lacking an element of the claims, the reference cannot anticipate the invention." Carmen Indus., Inc. v. Wahl, 220 USPQ 481, 485 (Fed. Cir. 1983).

Therefore, claim 2 is patentable over Decoste.

Claims 3-4 are patentable under 35 U.S.C. 102(b) over Long (U.S. Patent No. 5,412,767).

To be anticipating, a prior art reference must disclose "each and every limitation of the claimed invention[,]... must be enabling[,] and must describe...[the] claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." In re Paulsen, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Claim 3 is patentable over Long.

Claim 3 describes a method of creating effects in a processed graphic image, comprising providing an image channel with a graphic image having source pixels, providing an alpha channel having alpha channel pixels which are spatially equivalent to the source pixels, assigning a color value to the alpha channel pixels, brightening the color value assigned to alpha channel pixels, and causing edges of an image formed by the alpha channel pixels to have less transparency, which is not taught, described or inherent in Long.

Long relates to an image processing system in which a source patch of pixels is copied from one region of an image to a destination patch of pixels in response to the movement of a stylus over a touch-tablet.

14

Claim 3 teaches providing an alpha channel having alpha channel pixels that are spatially equivalent to the source pixels. The Examiner notes that Long teaches the use of a k coefficient for transparency, but this is not the same as an alpha channel with corresponding spatially equivalent pixels.

Applicant's invention allows the user to define a whole series of alpha channel values, brighten the values defined across the alpha channel, which is spatially equivalent to the source channel, and then cause the edges of the defined values to have less transparency. This is not the same as painting with a soft-edged brush. Painting with a soft edged brush produces strokes that may or may not have less transparency at the edges.

The Applicant's invention allows for the reducing of transparency around the entire edges of an area defined by the alpha channel, necessarily distinct from reducing the transparency of the edges of a brush stroke about to be applied. Nowhere does Long teach the alteration of an image defined by the alpha channel, after the image has been defined.

Therefore, claim 3 is patentable over Long.

Claim 4 is patentable over Leibman.

Claim 4 describes a method of creating effects in a graphic image, comprising providing a source image channel having source pixels, providing a color level with selected colors, providing an alpha channel with alpha channel pixels which are spatially equivalent to the source pixels, mapping multiple pixels in the alpha channel, embossing the pixels in the alpha channel and using a result of the embossing for changing brightness of the selected colors being applied, and providing highlights to the selected colors, thereby providing a sense of depth due to the embossing, giving the highlights to the applied colors, which is not taught, described or inherent

15

in Long.

Claim 4 teaches an embossing effect comprising embossing the pixels in the alpha channel, using a result of the embossing for changing brightness of the selected color, and providing highlights to the selected colors, thereby providing a sense of depth. The Examiner cites Long (column 5 lines 35-51), and makes the determination that modifying alpha channel pixel values is the equivalent to an embossing effect. It is not. To claim that Long's "modifying alpha channel pixel values" teaches all effects obtained by alteration of alpha channel values would be applying overbroad interpretation. The Applicant claims a specific effect, embossing, not taught by Long. This effect is obtained by a specific alteration of pixels including applying highlights to the altered pixels to produce the effect of depth.

The Examiner also notes that changing the color value meets the claimed limit of embossing and that multiple layers of brush strokes meet the claimed limitation of providing a sense of depth due to the embossing. However, to get multiple layers of brush strokes to replicate the embossing effect, while possible, is tedious and time consuming, and Applicant's embossing effect, a new method, produces the same result in a fraction of the time, a superior and novel method.

Therefore, claim 4 is patentable over Long.

Summary: Claims 2, 3 and 4 are patentable under 35 U.S.C. 102 under Decoste and Long.

The prior art reference must disclose every feature of the claimed invention, either explicitly or inherently. Hazani v. U.S. Intern. Trade Comm., 44 USPQ2D 1358 (Fed. Cir. 1997). "To establish inherency, the extrinsic evidence 'must make it clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would

16

be so recognized by persons of ordinary skill.'" In re Robertson, 48 USPQ2d 1949, 1951 (Fed. Cir. 1999) quoting from Continental Can Co. v. Monsanto Co., 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. Id. 20 USPQ2d at 1749.

Therefore, claims 2, 3 and 4 are patentable over Decoste and Long.

The present claims are patentable under 35 U.S.C. 103.

In considering the patentability of the present invention, it is requested that the Board consider the invention as a whole, consider the scope and content of the prior art as a whole, consider the differences between the claims at issue and the prior art, and consider the level of ordinary skill in the art to which the invention pertains at the time the invention was made. Graham v. John Deere Co., 148 USPQ 459, 467 (1966).

THE INVENTION AS A WHOLE

The invention, considered as a whole, is best described by the appended claims.

PRIOR ART AS A WHOLE

The prior art to which the invention pertains is typified by the references of record.

DIFFERENCES BETWEEN THE INVENTION AND THE PRIOR ART

Each of the present claims defines unique features and each is individually patentable over the prior art.

The test in reviewing rejections under 35 U.S.C. 103 in which the Examiner has relied on teachings of several references, is whether references, viewed individually and collectively, would have suggested claimed invention to a person possessing ordinary skill in the art, and citing references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that combination of the claimed elements would have been obvious. Ex parte Hiyamizu, 10 USPQ2d 1393-1395 (Board of

09/802,963

Patent Appeals and Inter., 1988); In re Kaslow, 217 USPQ 1089 (Fed. Cir. 1983); In re Deminski, 230 USPQ 313 (Fed. Cir. 1986).

Claims 1 and 5-8 are patentable under 35 U.S.C. 103(a) over Long (US 5,412,767).

The present claims particularly point out new and unobvious features of the invention which are not found in any reference and which would not have been obvious from the references.

Nothing in each of the references teaches or suggests the claimed features. Therefore, the references cannot anticipate nor render obvious the present invention as claimed.

Claim 1 is patentable over Long.

Claim 1 describes an apparatus for creating an emblazoning effect in a graphical image, comprising: (a) a processor, (b) a primary buffer for storing primary pixel values representing a region, (c) a secondary buffer for storing secondary pixel values representing the region, (d) a user-modifiable alpha channel for storing tertiary values for pixels representing the same region, (e) an alpha channel filter function representing application of both color values and brightness values to input pixel values, wherein said processor executes said function on the secondary pixel values an extent represented by the tertiary pixel values held in the alpha channel, for storing the resultant pixel values as the primary pixel values, in the primary buffer, and (f) user-activated means for copying the primary pixel values stored in the primary buffer to the secondary pixel values stored in the secondary buffer.

Long relates to an image processing system in which a source patch of pixels is copied from one region of an image to a destination patch of pixels in response to the movement of a

19

stylus over a touch-tablet.

The limitations of Claim 1 are not obvious under Long. Long, as the Examiner notes, is silent on the limitation of "(f) User-activated means for copying the primary pixel values stored in the primary buffer to the secondary pixel values stored in the secondary buffer." While Long may teach providing a means for copying pixel values from the primary buffer to the secondary buffer, Long does not teach a user-activated means for doing such. Nor would such a modification have been obvious. Long's method automatically updates the secondary buffer, but the Applicant's invention allows a user-activated update of such, permitting the user to determine when the secondary buffer is to be updated with changed pixels, thus facilitating a greater degree of control with UNDO-like functions, since the buffers are not both constantly automatically updated.

"It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In re Fritch, 23 USPQ2d 1783, 1784 (CAFC, August 1992), quoting from In re Gorman, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991).

Citing In re Gordon, 221 USPQ, 1127, the court pointed out, "the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification". In re Fritch, 23 USPQ2d 1783, 1784 (CAFC, August 1992). In the same case, In re Gordon, the court found a proposed modification inappropriate for an obviousness inquiry when the modification rendered the prior art reference inoperable for its intended purpose.

The courts have held, when the prior art contains apparently conflicting references, [the Board] must weigh each reference for its power to suggest solutions to an artisan of ordinary

20

skill. In weighing the suggestive power of each reference, [the Board] must consider the degree

to which one reference might discredit another. In re Young, 18 USPQ2d 1089, 1091 (CAFC,

1991).

In In re Jones, 21 USPQ2d 1941 (Fed. Cir. 1992), the Court reversed the Examiner's

obviousness holding because there was no suggestion, either within the references nor in the

knowledge generally available to one of ordinary skill in the art, to arrive at the claimed

invention. Also the Court pointed out:

> "Conspicuously missing from this record is any evidence, other than the PTO's
> speculation (if it be called evidence) that one of ordinary skill in the art would
> have been motivated to make the necessary modifications of the prior art ... to
> arrive at the claimed ... [invention]" (emphasis supplied). In re Jones, 21 USPQ2d
> 1941, 1944 (Fed. Cir. 1992).

Therefore, claim 1 is patentable over Long.

Claim 5 is patentable over Long.

Claim 5 teaches a method for creating an emblazoning effect in a graphical image,

comprising storing in a primary buffer of a processor primary pixel values representing a region,

storing in a secondary buffer secondary pixel values representing the region, storing tertiary

values for pixels representing the same region in a user-modifiable alpha channel, providing a

function representing application of color and brightness values to pixel values, executing said

function on the secondary pixel values to the extent represented by the tertiary pixel values held

in an alpha channel, and storing resultant pixel values as the primary pixel values, in the primary

buffer, and copying the primary pixel values stored in the primary buffer to the secondary pixel

values stored in the secondary buffer.

Claim 5 teaches storing tertiary values for pixels representing the same region (as the

primary and secondary buffer) in a user-modifiable alpha channel. Long teaches the use of an

21

alpha coefficient, k, to produce pixels of more or less transparency. While storing of alpha values for pixels is taught in Long, the alpha values are modifiable only as they are applied. Long only teaches pre-application modification of alpha values <u>to be stored</u>, which is to say, the edges of a brush stroke can be modified for transparency prior to application, but Long does not teach post stroke application modification of the alpha channel values. Essentially, the alpha channel is not <u>user-modifiable in and of itself</u>; the values stored therein can only be modified by the application of an additional brush stroke.

Therefore, claim 5 is patentable over Long.

Claim 6 is patentable over Long.

Claim 6 adds the patentable feature of choosing a media image, causing edges of the media image to have less transparency, adding the media image to a paint layer, and brightening parts of the paint layer with the media image to claim 5. These features are not taught nor suggested by Long.

Claim 6 teaches causing the edges of the selected media image to have less transparency. As in claim 3, this method is not taught by Long. Applicant's invention allows the user to, with a single step, cause the edges of the selected image to have less transparency. This stems from applicant's method of <u>modifying the alpha channel</u>. Long would require, if it provides for this at all, a series of brush strokes on the paint layer with <u>less</u> transparency, which would then be combined with the media image, to cause the edges of the media image to look as though it had <u>more</u> transparency. Long's process is wholly different and more inefficient than Applicant's method of simply increasing the transparency of the edges of the selected media image.

It is impermissible to use an applicant's claim as a springboard for hunting through the prior art for the claimed elements and for combining the found elements as claimed in the application. In re Vaeck, 20 USPQ2d 1438 (Fed. Cir. 1991).

Therefore, claim 6 is patentable over Long.

Claim 7 is patentable over Long.

Claim 7 adds the patentable feature of providing an image channel with a graphic image having source pixels, providing in the alpha channel alpha channel pixels which are spatially equivalent to the source pixels, assigning color values to the alpha channel pixels, brightening the color values assigned to the alpha channel pixels, and causing edges of an image formed by the alpha channel pixels to have less transparency to claim 5. These features are not taught nor suggested by Long.

Claim 7 teaches the wholesale modification of the alpha channel values at any point, not only as brush strokes are being applied. Nowhere does Long teach such a method. Long allows the user to define alpha channel values as strokes are applied, but once the strokes have been applied, the values cannot be altered, but by another stroke. Applicant's invention allows for modification of the alpha channel values whenever the user so desires, permitting the user to decrease transparency around the edges of an image defined by the alpha channel post brush stroke application.

Therefore, claim 7 is patentable over Long.

Claim 8 is patentable over Long.

Claim 8 adds the patentable feature of providing a source image channel having source

23

pixels, providing a color level with selected colors, and providing in the alpha channel alpha channel pixels which are spatially equivalent to the source pixels to claim 5. These features are not taught nor suggested by Long.

Claim 8 teaches a user-definable method of providing source image channels. Long does not teach such a method.

Therefore, claim 8 is patentable over Long.

Summary: Claims 1 and 5-8 are patentable under 35 U.S.C. 103(a) over Long.

Since Applicant has presented a novel, unique and non-obvious invention, reconsideration and allowance are respectfully requested.

LEVEL OF ORDINARY SKILL IN THE ART

A person having ordinary skill in the art is an artisan being taught the reference teachings.
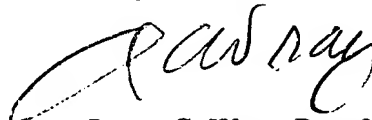
24

SUMMARY

Each of the present claims is patentable under 35 U.S.C. 102(b) and 35 U.S.C. 102(e) over the prior art of record.

When considering the present invention as a whole and the prior art to which the invention pertains as a whole, when considering the differences between the present invention and the prior art, and when considering the level of ordinary skill in the art to which the invention pertains, it is clear that the invention would not have been obvious under 35 U.S.C. 103(a) to a person having ordinary skill in the art at the time the invention was made.

CONCLUSION

Reversal of the Examiner and allowance of all the claims are respectfully requested.

Respectfully,

James C. Wray, Reg. No. 22,693
Meera P. Narasimhan, Reg. No. 40,252
1493 Chain Bridge Road, Suite 300
McLean, Virginia 22101
Tel: (703) 442-4800
Fax: (703) 448-7397

Date: December 6, 2004

09/802,963

CLAIMS APPENDIX

Appealed Claims:

     1.   Apparatus for creating an emblazoning effect in a graphical image, comprising:

(a) a processor,

(b) a primary buffer for storing primary pixel values representing a region,

(c) a secondary buffer for storing secondary pixel values representing the region,

(d) a user-modifiable alpha channel for storing tertiary values for pixels representing the same region,

(e) an alpha channel filter function representing application of both color values and brightness values to input pixel values, wherein said processor executes said function on the secondary pixel values an extent represented by the tertiary pixel values held in the alpha channel, for storing the resultant pixel values as the primary pixel values, in the primary buffer,

(f) user-activated means for copying the primary pixel values stored in the primary buffer to the secondary pixel values stored in the secondary buffer.

     2.   A method of creating effects in a graphical image, comprising choosing a media image, causing edges of the media image to have less transparency, adding the media image to a paint layer, and brightening parts of the paint layer with the media image.

     3.   A method of creating effects in a processed graphic image, comprising providing an image channel with a graphic image having source pixels, providing an alpha channel having alpha channel pixels which are spatially equivalent to the source pixels, assigning a color value to the alpha channel pixels, brightening the color value assigned to alpha channel pixels, and causing edges of an image formed by the alpha channel pixels to have less transparency.

4.   A method of creating effects in a graphic image, comprising providing a source image channel having source pixels, providing a color level with selected colors, providing an alpha channel with alpha channel pixels which are spatially equivalent to the source pixels, mapping multiple pixels in the alpha channel, embossing the pixels in the alpha channel and using a result of the embossing for changing brightness of the selected colors being applied, and providing highlights to the selected colors, thereby providing a sense of depth due to the embossing, giving the highlights to the applied colors.

5.   A method for creating an emblazoning effect in a graphical image, comprising storing in a primary buffer of a processor primary pixel values representing a region, storing in a secondary buffer secondary pixel values representing the region, storing tertiary values for pixels representing the same region in a user-modifiable alpha channel, providing a function representing application of color and brightness values to pixel values, executing said function on the secondary pixel values to the extent represented by the tertiary pixel values held in an alpha channel, and storing resultant pixel values as the primary pixel values, in the primary buffer, and copying the primary pixel values stored in the primary buffer to the secondary pixel values stored in the secondary buffer.

6.   The method of claim 5, further comprising choosing a media image, causing edges of the media image to have less transparency, adding the media image to a paint layer, and brightening parts of the paint layer with the media image.

7.   The method of claim 5, further comprising providing an image channel with a graphic image having source pixels, providing in the alpha channel alpha channel pixels which are spatially equivalent to the source pixels, assigning color values to the alpha channel pixels,

brightening the color values assigned to the alpha channel pixels, and causing edges of an image formed by the alpha channel pixels to have less transparency.

8.   The method of claim 5, further comprising providing a source image channel having source pixels, providing a color level with selected colors, and providing in the alpha channel alpha channel pixels which are spatially equivalent to the source pixels.

09/802,963

EVIDENCE APPENDIX

Original application, office actions and references of record.

APP B 1

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.

09/802,963